

**FLEXIBLE SCHEDULING OF NETWORK DEVICES WITHIN
REDUNDANT AGGREGATE CONFIGURATIONS**

ABSTRACT OF THE DISCLOSURE

- 5 A protocol is provided for backing up ATM network devices should they fail. The protocol is implemented in a system running ATMARP and supporting IP over ATM. In the protocol, multiple ATM network devices are combined in a "standby group" and share a common IP address. When an active member of the standby group fails, one of the other members of the standby group takes over ATM responsibility for 10 the functions of the failed device. An ATMARP Server determines which member of a standby group should handle IP packets destined for that group.